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EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,557

Applicant(s)

SCOTT ET AL.

Examiner

Javid A Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-12,14-17,19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed 4/08/2004 have been fully considered but they are not persuasive.

Examiner acknowledged the amended title of the invention, see page 12 section I of the remarks.

Applicant on pages 12-13, under section II argues the references Katou and Shah fail to establish a prima facie case of obviousness also Katou and Shah fail to disclose or suggest the features in the claim 1.

Examiner's reply: referring to the MPEP 2142, to establish a prima facie case of obviousness, three basic criteria must be met:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Katou in fig. 1 illustrates a digital image processor 45 is provided to obtain image data from the image memory on the basis of a display control signal from the CPU 40 for image processing and output to the display unit 12. Applicant uses claim language as "a raster map" that is equivalent to a digital image (map) and it would be obvious to one of ordinary skill in the art. Applicant uses the term "georeferencing", and the reference Katou in fig. 2B illustrates clearly geographic coordinates longitude and latitude.

Applicant on page 13 first paragraph argues the reference Katou fails to disclose the claim limitation of "receiving pixel coordinates for the first point on the first map and the second point on the first map", Examiner's reply: Katou silence about pixel coordinates for his maps,

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but Katou is using the pixel coordinates for displaying maps on a screen, and it is obvious to a person skill in the art to recognize the reference Katou in col. 11 lines 55-62 teaches the center part of the screen available in the one-screen mode on the left-side screen in the two-screen mode with the center part remaining in the same size. However, the display may be modified in such a way that the entire of the screen is displayed with scale reduced, or alternatively the right-side screen and left-side screen may be reversed. Examiner's interpretation: Applicant's first and second maps are equivalent to the reference Katou schematic diagram and map see fig. 10B. Applicant's first and second points on the maps are equivalent to location of the vehicle (first point) and the destination (second point) see fig. 3. Katou in fig. 5A, shows the present-location map screen is displayed. In the two-screen mode shown in fig. 5B, the architectural structure-shape map screen, containing the city map, is displayed on the left-side screen, and the present location map screen is displayed on the right-side screen. This arrangement allows a layout of buttons at the lower side of the screen for manual operation, whereby touching of one of these buttons or depression of a corresponding hardware button, performs a display-mode changeover and/or screen changeover enabling a call-up of each function. Katou in col. 4, lines 20-34 teaches the display unit 12 may include either a color cathode-ray tube (CRT) monitor or color liquid crystal display (LCD) module, for visual representation of all the navigation data as color images. The various displays may involve a route display based on map data and guidance data processed by the main controller 4, a range diagram, a road-intersection diagram, and the like. Katou in fig. 7 step S26 teaches upon receipt of the two-screen switch operation signal, the left-side screen displays the resultant scrolled screen while simultaneously displaying a present-location map screen on the right-side screen (step S25). If the scroll key is further

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operated (step S26), the map on the left screen moves with the movement of the corresponding location of the vehicle (first point) (step S27).

Second, there must be a reasonable expectation of success.

The Katou's invention provides a land vehicle navigation route apparatus capable of attaining, with enhanced versatility and flexibility, a variety of relevant guidance information in conformance with variable surrounding environmental conditions displayed on a present location map.

Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

Examiner's comment: In respect to claim limitations in Applicant's invention that covers broad languages for example: first and second maps and location of corresponding points on each maps, Katou in fig. 5B clearly illustrates those claim limitations. In fig. 5B have shown two digitized image (can be referred as raster maps) with the same georeferenced coordinates see figs. 2A-B. Katou is using display unit 12 may include either a color cathode-ray tube (CRT) monitor or color liquid crystal display (LCD) module, for visual representation of all the navigation data as color images. Therefore the pixel coordinates are integrated in order to display the correct location of the vehicle. In Katou's invention system the user should have a vehicle or other computer system, which are equipped with a navigation system.

Applicant on page 14 first paragraph argues the reference Shah does not overcome the deficiencies of Katou. Shah does not disclose a method or system for “georeferencing a raster map”.

Examiner’s reply: Shah in col. 3, lines 14-18 discloses by interrelating the three databases by a common vehicle identification and a latitude and longitude value (corresponding to georeferenced raster map), vehicle position within a raster map and its corresponding vector information can be simultaneously displayed.

Applicant on page 15 first paragraph argues that the references Shah and Katou only focus on the display of information to a user, such as a driver and a dispatcher.

Examiner’s reply: Strongly disagree with the Applicant’s conclusion as an ungenuine acknowledgment “only focus on the display of information to a user”. It raises new question: What does applicant provide to the user other than displaying of information?

Applicant on page 15 second paragraph argues the Examiner has not provided any motivation to combine the cited references.

Examiner’s reply: The motivation to combine these two references is as follows: Katou’s invention covers the multi-screen mode; Shah’s invention covers the vector and raster databases. The georeference coordinates are transmitted by mobile radio to both inventions’ databases. It is known to those skilled in the art to which the invention pertains. For example: The georeference coordinates are transmitted by mobile radio illustrates not only the current position of the vehicle but also the georeference coordinates of other locations as well. In order to illustrate a location of a vehicle, a user should have access to the georeference coordinates in the system already. The two references and the present invention capable of providing the georeference coordinates of a

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location. The two references are using the georeference coordinates for a land vehicle navigation system. The system is displaying the georeference coordinates simultaneously in a raster and a vector maps format. Applicant should articulate the purpose of the georeference coordinates in the second map area in respect to the first map area.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-17, 19-20 and 25-26 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant in claim 16 lines 8-12 and 14 uses modifier “means for receiving”, but Applicant does not explicitly specify, what Applicant means by using the “means for receiving” in the specification. Applicant in claim 16 line 16 uses modifier “means for computing”, but Applicant does not explicitly specify, what Applicant means by using the “means for computing” in the specification.

Applicant in claims 25-26 line 7 uses a term “a finite sequence”, but Applicant does not explicitly specify, what Applicant means by using the “a finite sequence” in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-12, 14-17 and 19-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Katou, and further in view of Shah et al. (referred as a Shah).

1. Claim 1,

As per claim 1 “A method of georeferencing a raster map, comprising: displaying a first map in one area of a display, said first map being a digital raster map; displaying a second map in a second area of the display, the second map being a georeferenced map that displays at least a portion of an identical geographic region displayed in the raster map;” Katou in Fig. 5B illustrates first and second digital raster maps, the right map considers as a first map and the left map considers as a second map that displays at least a portion of an identical geographic region. “receiving a first point on the first map; receiving a corresponding first point on the second map; receiving a second point on the first map; receiving a corresponding second point on the second map;” Katou in Fig. 5B illustrates an annotated point (a mark on the map) by showing an arrow with a circle. This point corresponds to the point on the left map. “receiving pixel coordinates for the first point on the first map and the second point on the first map; receiving geographic coordinates for the first point on the second map and the second point on the second map; and computing a georeferencing function for the first map in accordance with a relationship between the geographic coordinates”. This step can be repeated analyzing a point on the first map, and observing the location of the point on the other map. Katou in Fig. 5B illustrates a vehicle location as analyzing point on the map. Katou does not explicitly specify any selective point on the maps by the user. However, Shah in cols. 7 and 8, lines 62-68; 1-2, discloses that a user locatable mark 520 in the first display segment 530 corresponding to the latitude and longitude of the vehicle position is displayed. Intelligent street information is

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extracted from a third database, the Vector Database 631. Vector text information is displayed in a second segment 532 of the display. The vector text information corresponds to the latitude and longitude of the user locatable mark 520.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shah into Katou, because Katou's invention can display two raster maps (associating to each other) side by side on a display. And Shah's invention contains a complete database system raster database and vector database (see Figs. 1-4). Katou's invention can be modifying by integrating the Shah's database (raster and vector interface utility libraries) into item 4 (central processing device) with multi-screen mode of Katou's Fig. 1. The two references are using the georeference coordinates for a land vehicle navigation system. The system is displaying the georeference coordinates simultaneously in a raster and a vector maps format. Applicant should articulate the purpose of the georeference coordinates in the second map area in respect to the first map area. The implementation would have less cost and provides enough information to overcome the result of Applicant's invention.

2. Claim 2,

As per claim 2, The method of claim 1 further comprising receiving a verification that a point on the first map correctly matches geographically with a corresponding point on the second map", Katou in Fig. 5B illustrates the limitation of the claim 2.

3. Claim 3,

As per claim 3, " The method of claim 1 wherein the first map is a portion of the second map", Katou in Fig. 5B illustrates the limitation of the claim 3.

4. Claim 4,

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As per claim 4, “the method of claim 1 further comprising assigning a longitude and latitude for at least one of the first point and the second point on the first map based upon the geographic coordinates read for at least one of the first point and the second point on the second map.”

Katou in Fig. 2B discloses where the individual road is subdivided into portions at a plurality of nodes, the shape data may have coordinates consisting of a combination of the longitudinal and latitude variables with respect to each node number m.

5. Claim 5,

As per claim 5, “the method of claim 1 wherein at least one of the first point and the second point on the first map has a known longitude and latitude”, the step of known longitude and latitude are obvious, according to the Katou and Shah inventions.

6. Claim 6,

As per claim 6, “the method of claim 1 further comprising assigning a geographic coordinates to an additional point received on the first map using the computed georeferencing function.” The step is obvious because the subject of the invention is computer navigation system. See Katou abstract.

7. Claim 8,

As per claim 8, “the method of claim 1, further comprising receiving an additional point on the first map and automatically marking a corresponding additional point on the second map as calculated by the computed georeferencing function.” The step is obvious, because Katou in fig 5B and Shah in fig. 5 illustrate it.

8. Claim 9,

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As per claim 9, “the method of claim 8 further comprising receiving a correction of the additional point marked on the second map.” See Katou’s Fig. 5B.

9. Claim 10,

As per claim 10, “the method of claim 1 wherein an approximate georeferencing function is .”

See Katou’s fig. 5B and Shah’s fig. 5.

10. Claim 11,

The rejection of claim 1 applies to the rejection of claim 11.

11. Claim 12,

As per claim 12, “The computer readable medium of claim 11 wherein the contents of the computer readable medium are also capable of verifying that the point on the first map correctly matches geographically with a corresponding point on the second map”, Katou in Fig. 5B illustrates the limitation of the claim 12.

12. Claim 14,

As per claim 14, “wherein the contents of the computer readable medium are also capable of receiving an additional point on the first map and automatically marking a corresponding additional point on the second map as calculated by the computed georeferencing function.” The step is obvious, because Katou in fig 5B and Shah in fig. 5 illustrate it.

13. Claim 15,

As per claim 15, “The computer readable medium of claim 11, wherein the contents of the computer readable medium are also capable of assigning a longitude and latitude for at least one of the first point and the second point on the second map.” The step of known longitude and latitude are obvious, according to the Katou and Shah inventions.

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14. Claim 16,

The rejection of claim 1 applies to the rejection of claim 16.

15. Claim 17,

The rejection of claim 2 applies to the rejection of claim 17.

16. Claim 19,

The rejection of claim 8 applies to the rejection of claim 19.

17. Claim 20,

The rejection of claim 6 applies to the rejection of claim 20.

18. Claim 21-26,

The rejection of claims 1-6 and 8-10 applies to the rejection of claims 21-26.

Applicant uses a new term (a finite sequence) in claim 25 line 7 that cannot be found in the specification. However, Examiner interprets it as first/second points (latitude/longitude) on the maps.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini
Examiner
Art Unit 2672

Javid Amini

J. A. Amini
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PRIMARY EXAMINER